

**Comments of the Natural Resources Defense Council (NRDC) on the
*Committee Draft Transmittal of 2005 Energy Report Range of Need and Policy
Recommendations to the California Public Utilities Commission***

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The Natural Resources Defense Council (NRDC) appreciates the opportunity to offer these comments on the California Energy Commission's (CEC) *Committee Draft Transmittal of 2005 Energy Report Range of Need and Policy Recommendations to the California Public Utilities Commission* (Draft Transmittal Report). NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that Californians demand. We focus on representing our more than 130,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's electricity consumption.

We commend the CEC staff for distilling the *2005 Integrated Energy Policy Report* (IEPR) into a Transmittal Report to inform the California Public Utilities Commission (CPUC) 2006 procurement proceeding. Many of our comments presented here reflect those that we have presented regarding the IEPR as a whole, but some are specific to the Transmittal Report.

The Transmittal Report should include policy recommendations to the CPUC.

Some parties expressed surprise at the November 4, 2005 hearing that policy recommendations were included in the Transmittal Report. It is appropriate for the CEC to use this document to convey to the CPUC its recommendations that are relevant to and that will improve the CPUC's 2006 procurement proceeding process. NRDC supports the inclusion of these policy recommendations in the Transmittal Report.

NRDC supports the CEC and CPUC working together to adopt the greenhouse gas performance standard, without the use of offsets.

NRDC strongly supports the Greenhouse Gas Performance Standard proposed in the draft IEPR and further described in Chairman Desmond's memorandum dated September 22, 2005. This policy is needed both to achieve the Governor's GHG reduction targets and to protect Californians from the significant financial risks associated with additional investments in highly carbon-intensive generating technologies. We oppose the use of offsets to meet the standard because allowing for offsets would greatly diminish the risk mitigation benefits of the policy and discourage the investments in advanced technologies that are needed to achieve the Governor's long-term reduction targets. We support the CEC and CPUC working together to ensure that all of California will be protected from the financial risks of global warming pollution.

NRDC recommends that the Transmittal Report encourage the CPUC to direct the IOUs to perform portfolio analyses examining future resource fuel types.

The draft Transmittal Report correctly notes that the use of portfolio fit criteria has “value when looking at a single asset, [but] are less valid when examining a larger portfolio” (page 16). This points to an aspect of analysis that is currently missing from the IOUs’ procurement process: true *portfolio* resource planning through examination of future resource fuel types.

Although an analysis of the future resource fuel types that the load-serving entities could expect to be part of their portfolios was not conducted for this 2005 IEPR, we strongly recommend that the CEC encourage the CPUC to require the IOUs to perform this sort of *portfolio* resource analysis as a part of their resource planning. To better inform California’s energy policy, the IOUs should examine the likely future composition of their electricity mix, and the associated costs, risks and environmental impacts that customers can expect. We outline the need for this sort of true resource planning on pages 12-13 of our October 14, 2005 comments on the draft IEPR.

In addition, pages 44 and 47 of the draft Transmittal Report note that the CEC and CPUC share a commitment to implementing the loading order and thus preferred resources (energy efficiency, renewables, and distributed generation) are identified. However, there is currently no way to ensure that the last component of the loading order, clean fossil generation, is followed. Resource fuel type analysis by the IOUs using the “greenhouse gas adder” will help close this gap.

The CEC should recommend that the PUC’s long-term planning process include a comprehensive risk analysis.

Assessing, managing, and mitigating risks is one of the utilities’ most important and most challenging responsibilities in creating comprehensive and integrated resource plans. Similarly, overseeing the utilities’ management and mitigation of risks is one of the CPUC’s most important responsibilities in ensuring that customers receive reliable, affordable, and environmentally sensitive energy services. If ever a reminder was needed of this fact, the crisis of 2000 and 2001 showed forcefully that careful management of both financial and reliability risks is absolutely essential to the state’s wellbeing.

While the CPUC has implemented a process for managing short-term price risks through the use of a Customer Risk Tolerance, it is the long-term planning process that enables the IOUs and the CPUC to compare resource alternatives in a manner that captures interactive *portfolio* effects. Without long-term integrated planning, a utility that analyzes procurement options one by one is likely to “miss the forest for the trees.” Each individual investment decision may seem like the best decision, but the *additive* effect of the decisions and the impact on the overall portfolio would not be considered without true long-term plans.

This process should include testing a number of potential resource portfolios to determine their total long-term costs, to conduct a risk analysis of those portfolios under various scenarios, and to select an optimal portfolio that best meets the portfolio manager’s objectives. Given the

numerous risks in the electric industry, it is essential to conduct a risk analysis to test how robust each portfolio is in the face of various uncertainties. There are generally at least three different types of risks: (i) risks that can be quantified and for which historical experience can inform assessments of the future risk (e.g., load forecasts, natural gas price risk);¹ (ii) risks that can be quantified but for which no historical experience can inform the assessment (e.g., future regulation of carbon dioxide emissions); and (iii) risks that cannot be easily quantified, but can be qualitatively assessed (e.g., a change in FERC's market design, public acceptance of new resource siting, etc.). The preferred resource plan is generally the portfolio that has the lowest lifecycle cost (i.e., lowest anticipated long-term revenue requirement) and is most robust in the face of various risks, among other factors. The Commission can look to other utilities' risk analyses, including PacifiCorp, Idaho Power, Puget Sound Energy, for examples of what a portfolio-level risk assessment should include. Of course, a risk analysis will only be meaningful if the resource fuel types are identified and analyzed, as we discussed above.

The “range of need” should explicitly state what portion consists of contractual vs. physical needs.

The graphs showing the annual energy and capacity ranges of need that were presented by Staff at the November 4, 2005 hearing were extremely helpful in helping the reader visualize how the range of need was constructed. We recommend that these graphs be included in the final Transmittal Report.

The “range of need” currently encompasses both contractual and physical needs, but the distinction between the two is not always clear in the tables and graphs in the draft Transmittal Report. The CEC should avoid sending the unintentional signal that the entire amount of need is for new physical capacity that needs to be built, when some of this need can be fulfilled through contracts for existing physical resources. In addition, the additional need from retiring power plants should be separately identified.

The description of the CEC's demand forecast should be explicit about the treatment of energy efficiency and should include at minimum the energy efficiency that will be funded by the public goods charge (PGC).

As in the draft IEPR, it is unclear from the draft Transmittal Report text (section 5.1 and 5.3) whether no efficiency savings at all are included past 2008, or whether only PGC-funded savings are included similar to the 2003 IEPR. Since the PGC is legislatively mandated through 2011 and will not change during this time, it effectively serves as a minimum floor for efficiency investments during this timeframe and should be included in the “committed” energy efficiency in the demand forecast. Savings from PGC-funded energy efficiency programs can be estimated based on historical performance of energy efficiency programs. Further comments regarding the treatment of energy efficiency in the CEC demand forecast can be found on page 14 of NRDC's October 14, 2005 comments on the draft IEPR.

¹ Of course, while historical experience is extremely useful in assessing risks, this information must always be combined with informed judgment about the future.

In addition, it should be clarified whether the energy efficiency numbers apply to the IOU bundled load or entire service territory. It seems that the “uncommitted energy efficiency” shown in the Appendix B tables for each IOU does not match the energy savings goals set by the CPUC for the IOUs. Although these goals may be modified in future years, their current levels reflect the existing policy set for the IOUs, and the IOUs’ plans should reflect this.

The utilities’ decoupling mechanisms are effective in removing financial disincentives for any demand-side reductions, not just energy efficiency.

Page 14 includes the recommendation that “[a]pproaches such as the Earned Rate Adjustment Mechanism [ERAM], which were successful in keeping IOUs revenue-neutral for energy efficiency programs, could be implemented for CHP and DG.” Indeed, ERAM, the *Electric* Rate Adjustment Mechanism was successful, and a new generation of decoupling mechanisms adopted by the CPUC for all the major IOUs has been key to California’s successes in energy efficiency.² These decoupling mechanisms are strategy-neutral and will also help eliminate financial disincentives for any activities that would otherwise impact the IOUs’ revenues by reducing their sales volume.

² For a discussion of the new generation of decoupling mechanisms, see Bachrach, D., S. Carter and S. Jaffe, “Do Portfolio Managers Have An *Inherent* Conflict of Interest with Energy Efficiency?” *The Electricity Journal*, Volume 17, Issue 8, October 2004, pp. 52-62.